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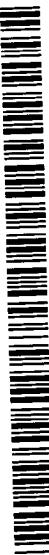
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- (71) Applicant: **DERIVION CORPORATION [US/US]**  
Suite 1750, 95 East Paces Ferry Road, N.E., Atlanta, GA  
30326 (US).
- (72) Inventor: **SHARMA, Dushyant**; 18 Clark Avenue West,  
Unit 63, Thornhill, Ontario L4J 8H1 (CA).
- (74) Agent: **PRATT, John, S.**; Kilpatrick Stockton LLP, Suite  
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(54) Title: INTEGRATED SYSTEMS FOR ELECTRONIC BILL PRESENTMENT AND PAYMENT

(57) Abstract: The present invention relates generally to electronic commerce, and more particularly to methods and systems for integrating electronic bill presentment and payment among billers, consumers, banks and other financial institutions, electronic payment facilitators, and web portals and other spaces able to support an interface for presentment and/or payment of bills.

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**Integrated Systems for Electronic Bill Presentment and Payment**

The present invention relates generally to electronic commerce, and more particularly to methods and systems for integrating electronic bill presentment and payment among billers, consumers, banks and other financial institutions, electronic payment facilitators, and web portals and other spaces able to support an interface for presentment and / or payment of bills.

Background of the Invention

10        Billing consumers for goods and services has always been a necessary exercise and transaction cost of engaging in credit-based commerce. Traditionally, businesses bill consumers for goods and services by generating and mailing paper bills or invoices. There are many obvious business concerns relative to paper-based billing. Companies utilizing paper-based billing do so at a substantial cost. For 15 example, a company with 100,000 accounts which are billed on a monthly basis may spend over two million dollars a year in paper-based billing expenses. Much of this expense stems from the cost of materials, postage, and manual processing of the paper bills, inserts, and envelopes.

20        Other significant logistical and business concerns detract from the paper-based billing option. The time delay associated with sending bills and receiving payments via conventional mailing deprive companies of the time value of money and therefore create additional transactional costs. This time delay is particularly troublesome to small billers and non-recurrent billers who tend to rely more heavily on cash flow.

25        Paper-based billing can also deprive billers of an opportunity to build brand. Although many paper billers include various types of marketing inserts with their bills in an attempt to use the billing activity as an additional opportunity to make favorable brand impressions on the consumer, those materials cannot be targeted as effectively as in an interactive session. For instance, billers do not have significant 30 realistic control over the circumstances under which, or whether, a consumer views

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particular inserts. Indeed, studies have shown that many consumers disregard such inserts altogether.

The development of the Internet creates new opportunities to transact business electronically, including to conduct the billing presentment and payment process electronically, in an on-line way or otherwise. Some refer to various aspects of the electronic billing process as electronic bill presentment and payment (EBPP). Instead of mailing paper bills, EBPP enables businesses to publish, distribute and/or present bills electronically on web pages. Instead of writing checks and applying stamps, consumers have the opportunity to pay bills by an electronic credit card charge or direct bank draft. The biller benefits by avoiding the cost of generating and mailing paper bills, and by avoiding the payment float occasioned by two-way mail delay and other delays in paper-based remittance. The consumer benefits with the added convenience of conducting transactions online, and the opportunity to pay many or all bills on one site or in one virtual space.

In practice, however, there are significant concerns with conventional approaches to EBPP. For example, in one common approach to EBPP, which is often referred to as the custom development method, billers create a proprietary electronic billing system and link it to a third-party for payment processing. Because custom development is mostly an internal EBPP solution, it gives billers the advantage of tight control over the billing system. However, this type of solution is very costly. Not only is it a technology risk because billers lose the flexibility to adapt to other EBPP standards, but it requires a substantial amount of manpower and infrastructure. Furthermore, such systems innately discourage consumer use or popularity, since the consumer is required to log onto and initiate a session on a separate site for each different bill the consumer wishes to pay.

A second common EBPP approach, which is referred to as the consolidator approach, presents its own set of problems. This method of enabling EBPP trades control of the billing interface and branding opportunity for a reduction in cost, risk, and internal staffing by outsourcing the EBPP to a third party consolidator. Here, the electronic payment processor takes on a lock box function of holding and moving cash during billing and payment. The payment processor performs an aggregation

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function by presenting multiple billers' statements at a single, consolidating web site. Not only does interposition of the consolidator and its interface between billers and consumers interrupt any existing relationship, but it also precludes exploitation of new biller opportunities to interact with consumers.

5 In addition to the problems already mentioned, existing EBPP enabling methods have various other disadvantages. For example, they remain an expensive option for most billers who lack sufficient economies of scale necessary to overcome the high fixed cost of implementation. These EBPP methods, which primarily focus on reducing biller costs, also often fail to address the issue of consumer convenience adequately, much less to provide effective incentives for consumer adoption.

10 Furthermore, conventional EBPP approaches, which seek to implement EBPP on portal interfaces, often require redundant resources supported by multiple entities and consequently waste processing and transport resources. For example, 15 using existing EBPP methods, if a consumer desires to pay AT&T bills electronically at a website such as Yahoo.com., the following occurs. First, the consumer requests that Yahoo.com receive the AT&T bill and send it to the consumer. Then, assuming AT&T partners with an electronic payment facilitator such as CheckFree, Yahoo.com makes a request to CheckFree. Finally, CheckFree initiates the request 20 to AT&T. Because each of these entities are independent, each requires its own resident database and other support functionality. Such conventional portal-supported EBPP approaches provide significant opportunity for improvement.

#### Summary of the Invention

25 The present invention provides fully integrated, end-to-end electronic bill presentation and payment systems. Such systems support integrated EBPP access and functionality for billers, consumers, banks, other financial institutions, and other electronic payment facilitators, any or all of which can be transacted at a web portal, web site or other interface or virtual space ("Portal Interface"). Such systems can 30 support such activities at multiple portals, so that consumers and others have the choice of paying bills and accomplishing other EBPP transactions in whatever virtual

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space or at whatever site they desire. The systems provide consumers, billers and others the ability to self-enable EBPP by interacting with the portal interface such as via a series of web pages. Such systems of the present invention can control all interactions between billers and consumers from the portal interface. In addition, the 5 systems can seamlessly orchestrate all other transactions with payment facilitators and banks. Therefore, all EBPP functionality and processes can be controlled by systems and processes according to the present invention.

The Portal Interface controlled by systems of the present invention provides individual consumers with a secure personalized electronic bill portfolio where they 10 can schedule, view, and pay their electronic bills. The Portal Interface controlled by such systems also enables billers to create consumer accounts and electronically publish their bills on a personalized electronic bill portfolio for viewing and payment. The systems can provide all bill processing, payment processing, consumer and biller data storage, and arrange all external billing transactions.

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#### Brief Description of the Drawings

Figure 1 is a block diagram showing external connectivity of a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

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Figure 2 is a block diagram illustrating the architecture of a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

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Figure 3 is a block diagram illustrating general functionality of a customer-related portal interface supported by a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

Figure 4 is a block diagram illustrating general functionality of a biller-related portal interface supported by a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

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Figure 5 is a sign in screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

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Figure 6 is a help screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 7 is an inbox screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

5 Figure 8 is a bill summary list screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 9 is a company list screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

10 Figure 10 is an add a company screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 11 is a my outbox screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 12 is a pay accounts screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

15 Figure 13 is a preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 14 is a change password screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

20 Figure 15 is a personal information screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

25 Figure 16 is payment reminder creation screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 17 is a generic create a reminder screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

30 Figure 18 is a contact customer service screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

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Figure 19 is a biller signup screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 20 is a bill template design step 1 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

5 Figures 21 is a bill template design step 3 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figures 22 is a bill template design step 2 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

10 Figure 23 is an invoice creation step 1 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 24 is an invoice creation step 2 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

15 Figure 25 is an invoice preview screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 26 is a report builder screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 27 is a reports screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

20 Figure 28 is an upload bills screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 29 is bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 30 is a second bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

25 Figure 31 is a third bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Figure 32 is an add an account screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

30 Figure 33 is a send customer e-mail screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

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Detailed Description of the InventionA. General Overview of System

Figure 1 shows connectivity of a preferred embodiment 10 of integrated electronic bill presentment and payment systems ("systems") of the present invention. System embodiment 10 interfaces with, among other external entities, billers 12, which may include very small and non-recurrent billers 14, banks and other financial institutions 16, payment facilitators 18, web portals and bill presenters 20, and consumers 22. System embodiment 10 shown in Figure 1 is implemented 5 on a Sun platform using an Oracle database with other programs that allow connectivity via any desired network or transport infrastructure, preferably the Internet, to a portal interface in spaces 20 via an Extensible Markup Language or other standard markup or other common data interchange model or language. Portal interfaces 15 may be implemented in Hypertext Markup Language or as 10 otherwise desired to operate on browsers, whether or not applet enabled, or as otherwise desired.

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Figure 2 shows an architecture diagram for a preferred embodiment 10 of systems according to the present invention. System embodiment 10 supports a portal interface 15 which allows consumers 22 and billers 12 and / or 14 the ability to self-enable EBPP by interacting with a series of web pages or other interfaces or 20 presentations of whatever desired design or type on a web portal 20 or at any other location in actual, electronic or virtual space, supported by the global information infrastructure, successor systems, private systems or any other communications network or system. System embodiment 10 can enable all EBPP functionality via the portal interface 15. System embodiment 10 can control all interactions or 25 transactions between billers 12 and / or 14 and consumers 22 using portal interface 15 as the communications and/or presentation medium. System embodiment 10 can also arrange all other necessary transactions with payment facilitators 18 and banks 16.

System embodiment 10 may be created to allow consumers 22 to define 30 whatever portal or any other location or space they desire to access system embodiment 10. This can be any web portal 20 or other bill presentment web site,

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such as Yahoo.com® or GO2Net®. In order to initialize a bill portfolio, consumers 22 can go to the selected web portal or other space 20. System embodiment 10 prompts consumers 22 for personal information sufficient for authentication. System embodiment 10 can be adapted only to assign consumers 22 a secure bill portfolio 5 when consumers 22 can be authenticated by a third party credit verifier service.

After being verified, a consumer bill portfolio may be access controlled by any desirable schema or paradigm, including by using a bill portfolio identification number, a unique consumer identification number, and an encryption key defined by consumers 22. Consumers 22 may also define multiple accounts at the same bill 10 portfolio.

Figure 3 illustrates the general functionality of a preferred embodiment of a consumer portal interface supported by system embodiment 10. System embodiment 10 provides consumers 22 a secure personalized portfolio for viewing and paying electronic bills that are input into system embodiment 10 by various billers. System embodiment 10 directs all incoming electronic bills to the bill portfolio 15 of consumers 22. Consumers 22 also have the option of notifying paper-based billers that they desire to have bills presented electronically. System embodiment 10 can notify the billers and initiate electronic scanning of paper bills. Consumers 22 may access the portfolio at any location of choice using any interface, such as, for 20 instance, a conventional web browser, other online device, any wireless device, or any other device which may communicate with system embodiment 10 in any manner. Any such device is a candidate to support presentation of or transaction with portal interface 15 by consumers 22. Consumers 22 can also define the format of the billing information. For example, the billing data may be supplied to 25 consumers 22 in a variety of standard accounting formats.

System embodiment 10 also enables consumers 22 to pay electronic bills via credit card, ACH, or electronic funds transfer or using any other mode or medium of payment or reconciliation. System embodiment 10 can also support payments between different consumer bill portfolios. In addition, system embodiment 10 can 30 provide for various types of communication between or among billers 12 and / or 14 and consumers 22 and between or among consumers 22.

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Figure 4 illustrates the general functionality of a preferred embodiment of a biller interface in accordance with the present invention with system embodiment 10. Billers 12 and / or 14 may self-enable EBPP by accessing system embodiment 10. System embodiment 10 can obtain information from billers 12 and / or 14 and 5 authenticate by a credit verifier service if desired. After a biller is authenticated, system embodiment 10 enables billers 12 and / or 14 to define the presentation of the bill, among other things. Billers 12 and / or 14 may also do such things as customize bill templates, upload logos, addresses, and define bill fields. System embodiment 10 may support billers 12 and / or 14 carrying out any desired or 10 desirable task, such as specifying marketing messages that are defined by consumer specific rules, set up consumers 22 to bill and / or set up specialized consumer groups based on predefined rules.

Billers 12 and / or 14 can also specify various other bill generation criteria. The bill criteria can accommodate criteria such as whether the bill is for a fixed 15 amount or whether it is formula based. Billers can also specify the bill schedule.

Billers 12 and / or 14 may bill consumers 22 by inputting any bill data. System embodiment 10 enables billers 12 and / or 14 to predefine how the electronic bill is to be displayed. System embodiment 10 also manages the routing 20 of the bills. System embodiment 10 selects the biller-defined delivery channel, which could be either paper or electronic. If a bill portfolio exists, the bill is placed in it. If the billed consumer 22 does not have a bill portfolio, electronic deliveries can be sent via email along with a message notifying consumer 22 that the biller is using electronic billing. If neither exists, system embodiment 10 can perform standard paper billing. System embodiment 10 may also enable billers 12 and / or 14 to 25 identify conventional mailing addresses for consumers 22 so that consumers 22 may enable standard paper billing. System embodiment 10 may also provide notification to billers 12 and / or 14 when bills are rejected, bills are overdue, or payments are received.

B. Consumer Interface to System

Figures 5 -18 show web pages of a preferred embodiment of a consumer portal interface on a web portal 20 controlled by system embodiment 10. As mentioned above, the interface 15 can appear on any device in any location in actual, electronic or virtual space, using any network or communications system; use of the web and browser paradigm for the following description is merely one example and should not be interpreted to limit the invention or its scope in any way. That said, figures 5 and 6 show web pages for the initial welcome screens for a web portal 20 of system embodiment 10. As any other web site or web portal 20 on the Internet, the welcome screen and all linked web pages on web portal 20 are freely accessible to billers 12 and / or 14 and consumers 22 using any standard web browsing software and computer. Consumers 22 may also access the web pages by using any device of whatever stripe, such as a personal digital assistant, a cellular phone, or pager, which supports Internet access via wireless technology, standard telephone dial-up or network connections, or any communications system. The welcome screen permits new billers 12 and / or 14 and consumers 22 to create a new account. When setting up a new account, billers 12 and / or 14 and consumers 22 are required to input personal information that can be used to identify and authenticate the user for subsequent sessions. After the user inputs the personal information, the system can contact a credit verifier company, such as Equifax® or TRW®, and uses a credit report supplied by the company to automatically determine whether the user meets certain predetermined requirements, in which case a new account may be created.

After creating an account, the welcome screen permits new consumers 22 to create a new personalized bill portfolio or additional bill portfolios. Some sophisticated consumers 22 may desire to have separate bill portfolios within the same account for multiple homes, separate individuals within a home, or for a separate business. After a biller account is established, new billers 12 and / or 14 may access the biller functionality, which is discussed below.

The welcome screen also permits billers 12 and / or 14 and consumers 22 that have already registered to access system embodiment 10 by inputting a user identification number, a personalized password, and an encryption key. These user specific identifiers ensure that only registered users that have been authenticated are granted access to personal information stored on system embodiment 10.

Figures 7 - 18 show a series of web pages for a personalized bill portfolio management system that registered consumers 22 use to access and interact with a bill portfolio via portal interface 15. Figure 7 shows an incoming bill web page that enables consumers 22 to interact with all incoming electronic bills including electronic bills that have been received but remain unpaid and paper bills that have been received and scheduled for electronic presentment. For each bill, the web page displays the biller's name, the amount due, the date payment is due, and the status of the bill. Consumers 22 may also select and view each electronic bill. Figure 8 shows a web page displaying a sample bill summary and payment information. The incoming bill web page also permits consumers 22 to select and electronically pay particular bills.

System embodiment 10 enables consumers 22 to notify paper billers that they desire to have bills presented electronically. System embodiment 10 can contact the paper-based biller and notify the biller that their electronic bills may be presented to consumers via system embodiment 10. If the biller declines, system embodiment 10 can arrange to have the paper bill scanned into system embodiment 10 where it can be viewed and paid by consumers 22 using system embodiment 10. Paper bills that have been received and are being processed for scanning and electronic presentment are displayed on the incoming bill web page as "scheduled". System embodiment 10 may also enable billers 12 and / or 14 to identify conventional mailing addresses for consumers 22 so that consumers 22 may enable standard paper billing.

Figure 9 shows a biller list web page that enables consumers 22 to list the companies whose bills they desire to pay electronically. For each biller 12 and / or 14, the web page displays the company name, a corresponding identification number, and whether or not the company has been scheduled for electronic bill

presentment and payment. Consumers 22 may also use the web page to modify the configuration for a biller 12 and / or 14 or to delete a biller 12 and / or 14 from the list altogether. Figure 10 shows a web page that enables consumers 22 to add additional billers 12 and / or 14 for electronic bill presentment and payment. The 5 web page has a series of pull down menus enabling a consumer 22 to define a biller configuration. One menu allows the consumer 22 to define a particular category for the biller 12 and / or 14. For example, consumers 22 may categorize billers 12 and / or 14 as a utility biller, telecommunications service biller, credit card biller, professional services biller, or any other category of relevance to the consumer.

10 Another menu allows the consumer 22 to select a bill delivery method such as CheckFree® or any other third party electronic payment facilitator 18. Other menus permit the consumer 22 to input the account number for the biller 12 and / or 14, as well as an expiration date. Consumers 22 may also elect to enable functionality permitting a recurring payment schedule.

15 Figure 11 shows an outgoing bill web page that enables consumers 22 to interact with electronic bills that have already been paid. Similar to the incoming bill web page, the outgoing bill web page displays the biller's name, the amount due, the date payment is due, and whether or not the bill has been paid. Consumers 22 may also select and view a bill summary and payment information screen for a particular bill. Finally, consumers 22 may select and delete bills that have already been paid.

20 Figure 12 shows a payment accounts web page that enables a consumer 22 to view, add, modify, and delete credit card or debit card accounts that the consumer 22 desires to use for electronic payment of bills. For each payment account the consumer 22 is required to input an account type, an account number, an account name, expiration date, and the name appearing on the card.

25 Figure 13 shows a consumer preferences web page that enables the consumer 22 to personalize a bill portfolio. Figures 14 and 15 show web pages that enable consumers 22 to view and modify personal information associated with a bill portfolio and a personalized password for accessing a bill portfolio. The web page 30 also enables consumers 22 to initialize email notification of when bills are presented

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to a bill portfolio for payment. Consumers 22 may also create generic reminders or bill payment reminders, which may be sent directly to an email address.

Figures 16 and 17 show web pages for creating and scheduling generic reminders and payment reminders. The web pages enable consumers 22 to specify 5 when the reminder will begin to be sent, how often the reminder will be sent, at what time the reminder will be sent, and when to stop sending the reminder. For generic reminders, the consumer 22 can be required to specify recipients of the reminder and the content of the message.

At any time while logged into system embodiment 10 and accessing a bill 10 portfolio, consumers 22 may contact consumer service by using a consumer service web page as shown in Figure 18. The consumer service web page also lists a variety of contact information, as well as links to answers to frequently asked questions.

The pages described above and shown in Figures 5 - 18 are merely 15 exemplary. In a first sense, each or any of them may contain additional fields, or may contain fewer fields, to solicit or require information of any type or sort, or to allow consumers 22 to interact with system embodiment 10 in any way for the purpose or result of bill payment or reconciliation. In a second sense, other pages 20 may be employed for such results or purposes, or any of the above-mentioned pages may be omitted. Again, these pages are merely one example of an embodiment of a portal interface that can support system embodiment 10 on any platform or device anywhere in actual, electronic or virtual space.

#### C. Biller Interface to System

Figures 19 - 33 show a series of web pages that billers 12 and / or 14 may 25 use to self-enable EBPP. (As mentioned above, the interface 15 can appear on any device in any location in actual, electronic or virtual space, using any network or communications system; use of the web and browser paradigm for the following description is merely one example and should not be interpreted to limit the 30 invention or its scope in any way.) Any type of biller 12 and / or 14 may use system embodiment 10 to self-enable EBPP, but it is particularly advantageous to billers 14

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with a relatively small number of consumers, as well as billers 14 with non-recurring consumers. Figure 19 shows a registration web page for signing up to use system embodiment 10 for EBPP. Billers 12 and / or 14 can enter a series of information text boxes on the web page, which include a merchant identification number.

- 5 System embodiment 10 can then contact a credit verifier and access a credit report supplied by the credit verifier to automatically determine whether the biller 12 and / or 14 is authenticated. If the biller 12 and / or 14 is authenticated, system embodiment 10 automatically notifies the biller 12 and / or 14 and access to system embodiment 10 is granted.

10 As described above, once registered and authenticated billers 12 and / or 14 may access system embodiment 10 by inputting a user identification number, a personalized password, and an encryption key. Figures 20 - 22 show web pages that enable billers 12 and / or 14 to define the layout of an electronic bill. Figure 20 shows a web page for choosing a predefined template provided by system embodiment 10. Figure 21 shows a web page that enables billers 12 and / or 14 to interactively design their own bill template. Once the layout of the bill is defined, billers 12 and / or 14 can specify what type of software program they will use to provide consumer billing data to system embodiment 10. In the preferred embodiment of the invention, system embodiment 10 supports billing data of any type, such as, for example, data formatted to comply with over the counter software accounting packages such as QuickBooks® and Peachtree®, or billing data formatted as a printer datastream or a database export. Figure 22 shows a web page for billers 12 and / or 14 to select the appropriate billing data format.

25 In situations where creating a bill template is not manageable, as for one time transactions with a consumer 22, system embodiment 10 can enable billers 12 and / or 14 to send a one time only invoice. Figures 23 - 25 show web pages that enable this functionality. Billers 12 and / or 14 can be required to include the biller's name, the amount due, a description of the goods or services, the recipient of the invoice, the number of the bill portfolio where the invoice is to be sent, and the date payment 30 is due. After inputting the required invoice information, system embodiment 10

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preferably permits the biller 12 and / or 14 to preview the invoice as it will appear in the consumer's bill portfolio and send it.

System embodiment 10 can also enable billers 12 and / or 14 to create various reports. Billers 12 and / or 14 may create reports showing any of a number 5 of transactional statistics, such as the number of bills paid, the number of bills sent, the number of bills disputed, the number of bills partially paid, the number of bills published, the number of bills not published, and / or the number of bills that have been reviewed for quality assurance. Figures 26 and 27 show web pages enabling billers 12 and / or 14 to create and schedule reports.

10 System embodiment 10 can also enable billers 12 and / or 14 to upload bills from a consumer's bill portfolio. Figure 28 shows a web page that enables billers 12 and / or 14 to do this. Billers 12 and / or 14 may search for a particular consumer 22 by name or may sort for a number of consumers 22 in a predefined group. System embodiment 10 performs the requested query and then displays each of the bills in 15 the consumer's bill portfolio that are associated with the biller. Billers 12 and / or 14 may also select and preview a particular bill. Figure 29 shows a web page for previewing the bill of consumers 22. From the preview screen, billers 12 and / or 14 may edit the bill, send the bill, or defer sending the bill until later. Figure 30 shows a web page that enables a biller 12 and / or 14 to edit a consumer's bill.

20 As shown in Figure 31, system embodiment 10 can also enable billers 12 and / or 14 to add, modify, or delete consumer accounts. Billers 12 and / or 14 may add a consumer account or choose the account organizer by selecting the appropriate link on the web page. Figure 32 shows the linked web page where a biller 12 and / or 14 may input a new client's name, account number, email address, and attribute.

25 System embodiment 10 may also enable billers 12 and / or 14 to identify conventional mailing addresses for consumers 22 so that consumers 22 may enable standard paper billing. The attribute field can be used in combination with the account organizer to define groups of consumer accounts to simplify bill generation and delivery. Billers 12 and / or 14 may use consumer groups to define and 30 generate bills without the need for repetition. For example, when creating a list of consumer accounts, a biller 12 and / or 14 may assign a specific zip code attribute to

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a group of accounts, which would enable the biller 12 and / or 14 to generate and deliver all bills of the specific zip code at the same time.

As shown in Figure 33, at any time while logged into system embodiment 10 billers 12 and / or 14 may send emails to a consumer's bill portfolio. Billers 12 and / or 14 can use this functionality for payment reminders, marketing notices and offers, 5 or any other advantageous use.

The pages described above and shown in Figures 19 - 33 are merely exemplary. In a first sense, each or any of them may contain additional fields, or may contain fewer fields, to solicit or require information of any type or sort, or to 10 allow billers 12 and / or 14 to interact with system embodiment 10 in any way for the purpose or result of bill presentment or to effectuate payment or reconciliation. In a second sense, other pages may be employed for such results or purposes, or any of the above-mentioned pages may be omitted. Again, these pages are merely one example of an embodiment of a portal interface that can support system 15 embodiment 10 on any platform or device anywhere in actual, electronic or virtual space.

The foregoing is provided for purposes of disclosure of a preferred embodiment of the present invention. Additions to, deletions or omissions from, or changes to interfaces, systems, or embodiments disclosed above may be 20 accomplished; so long as they help carry out the results or purposes of providing systems that support interfaces to effectuate EBPP, they remain within the scope or spirit of the invention.

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1. An electronic bill presentment and payment system, comprising:
  - a. a database capable of storing data relating to a plurality of bills sourced from a plurality of billers, and corresponding to a plurality of consumers;
  - b. processing capacity coupled to said database capable of converting data from said plurality of billers into format compatible with said database;
  - c. processing capacity coupled to said database capable of allowing at least some of said plurality of billers to review and obtain reports in real time from data relating to said billers and status of said biller's bills stored in said database;
  - d. said database inaccessible to any entity not having encrypted access to said database;
- 10 e. processing capacity coupled to said database capable of supporting a plurality of visual interfaces, each supported by a site different from other of said visual interfaces, each of said visual interfaces capable of allowing a consumer to review and pay said consumer's bills and thereby change information in said database only if said consumer has been authorized access to said database by a credit verifier.
- 20 2. A system according to claim 1 further comprising processing capacity capable of communicating with a plurality of financial institutions in order to couple said financial institutions to said database in order to facilitate payment of bills.
- 25 3. A system according to claim 1 further comprising processing capacity capable of communicating with a plurality of payment facilitators in order to couple said payment facilitators to said database in order to facilitate payment of bills.
- 30 4. A system according to claim 1 in which said credit verifier is a third party credit verifier.

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5. A system according to claim 1 in which said processing capacity coupled to said database supporting a plurality of visual interfaces employs HTML transmissions.
- 5 6. A system according to claim 1 in which said processing capacity coupled to said database supporting a plurality of visual interfaces employs XML transmissions.
- 10 7. A system according to claim 4 in which said consumer is authorized access to said database by a credit verifier during a particular consumer session on a visual interface, only after an interactive session between said system and said credit verifier during said consumer session.
- 15 8. In an electronic billing presentment and payment system comprising:
  - a. a database capable of storing data relating to a plurality of bills sourced from a plurality of billers, and corresponding to a plurality of consumers;
  - b. processing capacity coupled to said database capable of converting data from said plurality of billers into format compatible with said database;
  - c. processing capacity coupled to said database capable of allowing at least some of said plurality of billers to review and obtain reports in real time from data relating to said billers and status of said biller's bills stored in said database;
  - d. said database inaccessible to any entity not having encrypted access to said database;
  - e. processing capacity coupled to said database capable of supporting a plurality of visual interfaces, each at a different web site from other of said visual interfaces, each of said visual interfaces capable of allowing a consumer to review and pay said consumer's bills and thereby change information in said database only if said consumer has been authorized access to said database by a credit verifier;
- 20
- 25

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a process for allowing a consumer to pay bills from one of said visual interfaces, comprising:

- a. receiving from said consumer, via said visual interface, logon information;
  - 5 b. initiating an interactive session with a credit verifier to obtain authorization for said consumer to have access to information from said database;
  - c. after said authorization from said credit verifier has been received from said credit verifier, allowing said consumer to access information in said 10 database in order to pay bills.
9. A process according to claim 8 in which said consumer uses a visual interface on a web site.
- 15 10. A process according to claim 8 in which said consumer also reviews a plurality of bills from a plurality of billers.
11. A process according to claim 8 in which said consumer also inquires online about status of at least one bill, said inquiry being conveyed by said system to 20 particular billers.
12. A process according to claim 11 in which an interactive session is established between said consumer and at least one of said billers.
- 25 13. A process according to claim 8 in which said consumer pays bills using a credit card.
14. A process according to claim 8 in which said consumer receives reports from said system.

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15. A process according to claim 8 in which said system automatically notifies a biller when a consumer has paid a bill.
16. A process according to claim 8 in which a biller modifies, online, the 5 format in which a bill is presented to said consumer on said visual interface.
17. A process according to claim 8 in which said consumer modifies, online, the format in which a bill is presented to said consumer on said visual interface.
- 10 18. A process according to claim 8 in which said consumer selects for review bills coming due on a certain date.
19. A process according to claim 8 in which said consumer selects for review bills overdue.
- 15 20. A process according to claim 8 in which said consumer pays bills from a plurality of visual interfaces, each on a different site.
21. A process according to claim 8 in which at least one of said visual 20 interfaces for particular consumer is not supported by a website.

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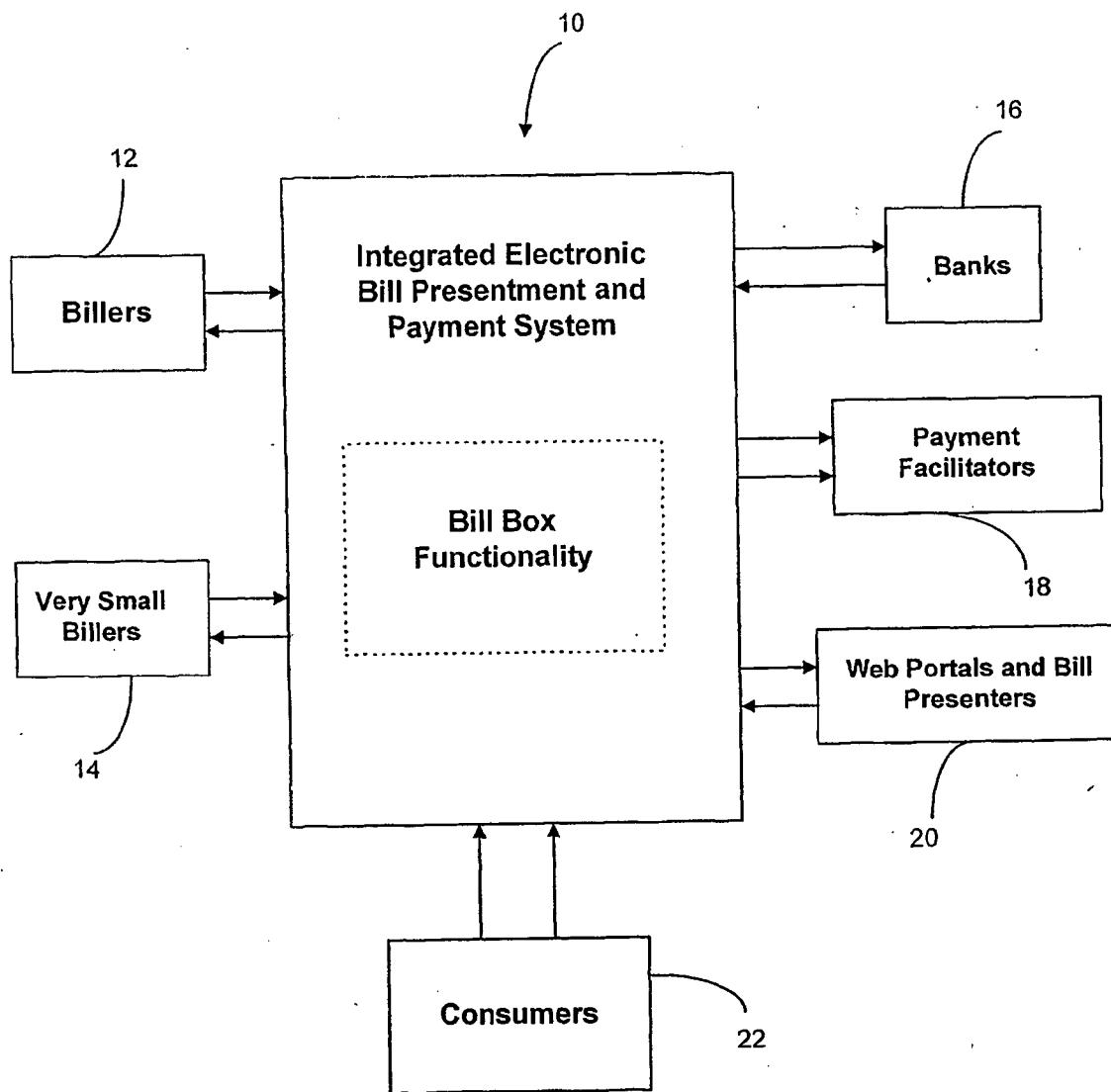
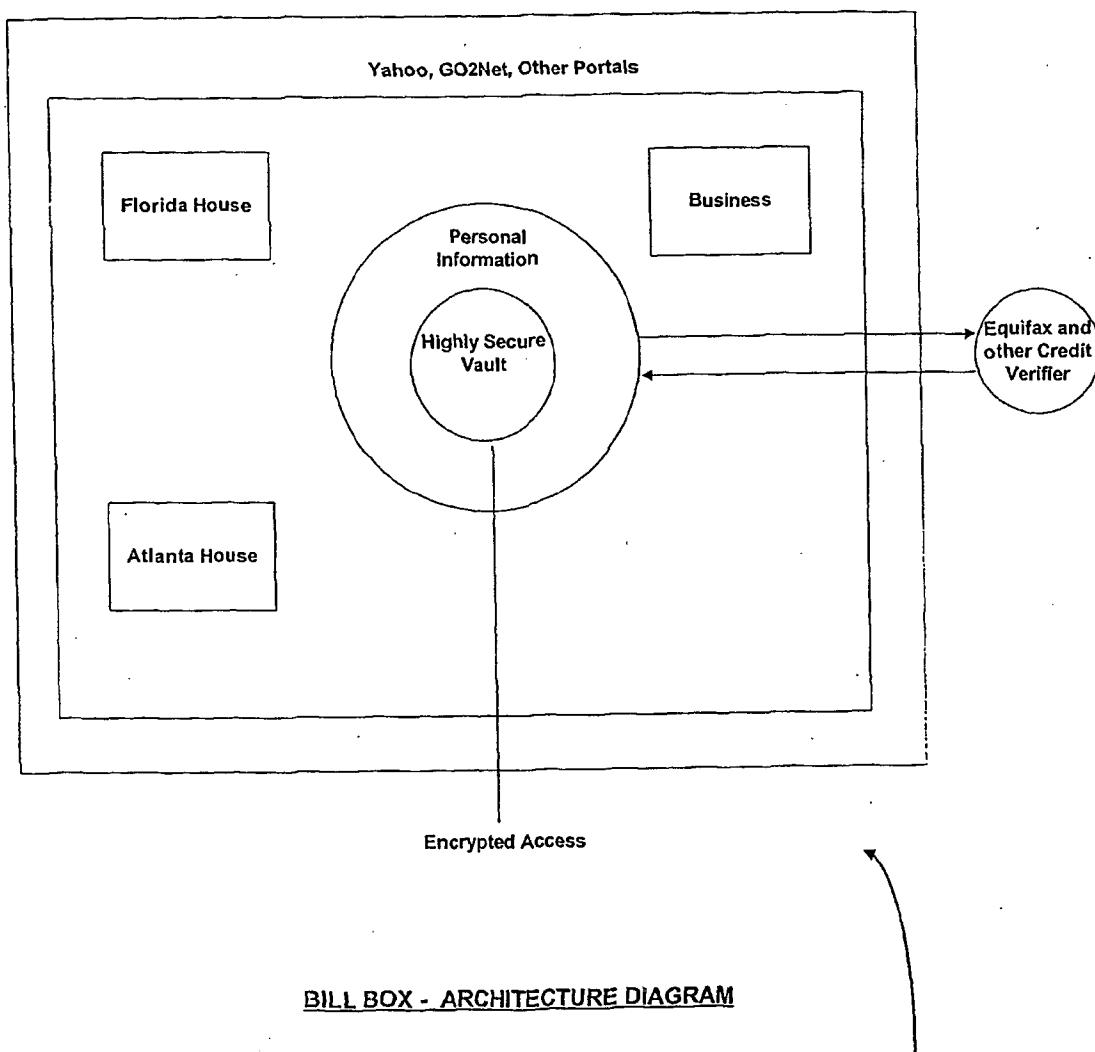


Fig. 1

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**Fig. 2**

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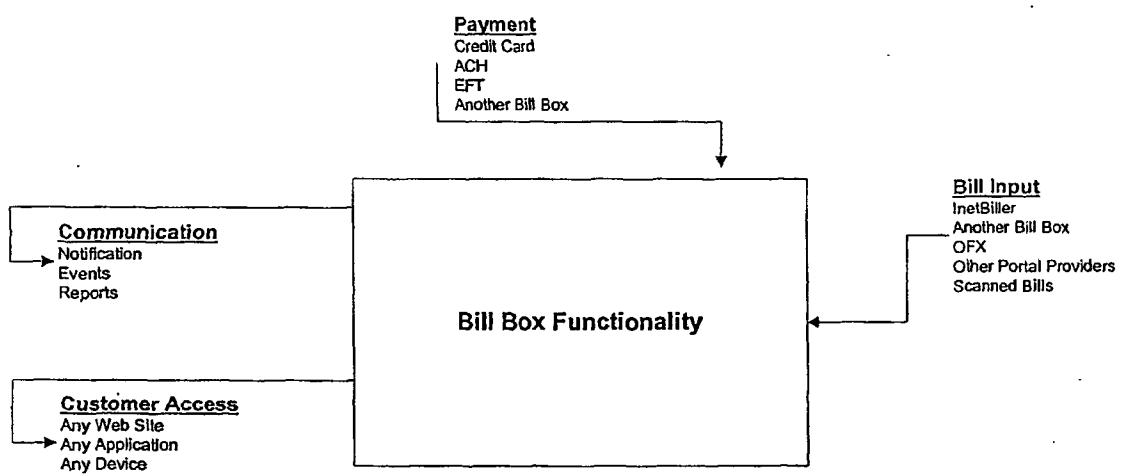
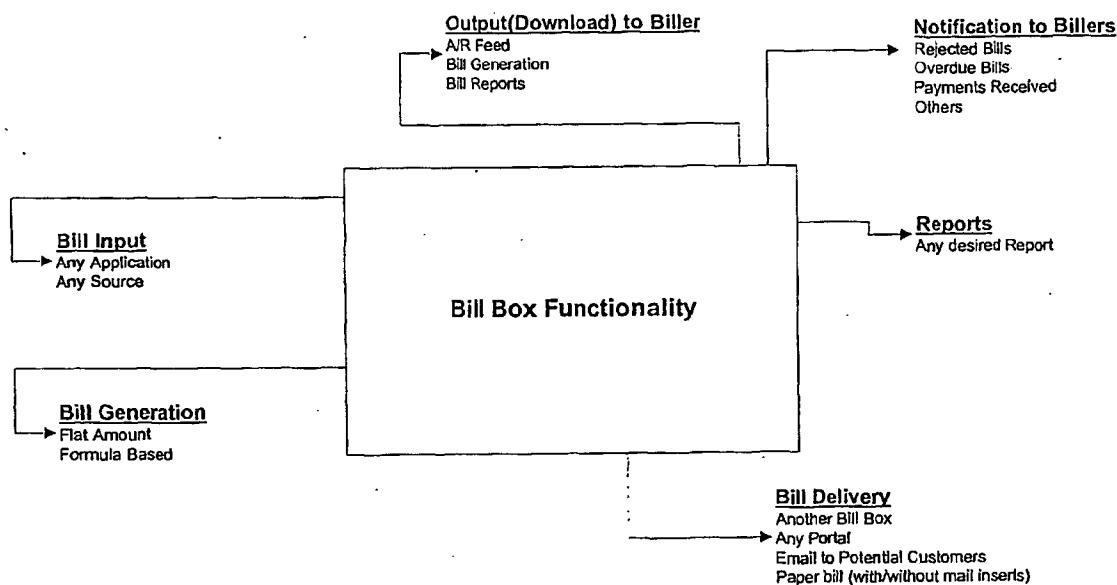
**Bill Box - Customer View**

Fig. 3

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#### Bill Box - Biller View

Fig. 4

**go2net stocks metaspyp games shopping auctions email billbox Go2Net Personal**

Welcome to go2net Billbox: Your highly secure Vault for billing

<b>I'm a New User</b>	<b>Send Your Bills To</b>
<u>Go2Net Personal</u> <b>Create A BillBox</b>	<ul style="list-style-type: none"> <li>• Any Customer</li> <li>• Any Where</li> <li>• Any Time</li> <li>• Any Way</li> </ul>
First Step is to create a user account. If you have already done this proceed to second step Second step is to create a Bill Box!	<b>Using secure Billbox Vault™</b>
<b>I'm already registered for a BillBox!</b>	<b>Get Your Bills From</b>
BillBox ID: <input type="text" value="234AS234"/> Login ID: <input type="text" value="demo"/> Password: <input type="password"/>	<ul style="list-style-type: none"> <li>• Any Device</li> <li>• Any application</li> <li>• Any place</li> <li>• Any time</li> </ul>
<input checked="" type="checkbox"/> Remember my ID & Password ( <a href="#">What's this?</a> ) <input type="button" value="Sign in"/>	

Trouble signing in?

[Get help signing in here.](#)

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**Fig. 5**

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## Welcome to go2net Billbox: Your highly secure Vault for billing

Note: BillBox provides a very secure Vault to store all your information. There is no open data. All data is encrypted before it is stored. The encryption key is defined by you and is known only to you.

To access your billbox, you need

- **Billbox id :** Billbox id is an unique identification that is provided to each Billbox user.
- **Userid/Password :** Unique combination known to only you.
- **Encryption Key:** Defined by you. No data can be accessed without this key, even if you enter the bill-box using valid userid/password.

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**Fig. 6**

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go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

my bills are you a biller? logout help

**bill box**

**Inbox**

**OUTBOX**

**COMPANY LIST**

**PAY ACCOUNTS**

**PREFERENCES**

**CONTACT US**

**My inbox**

select Biller name	Amount due	Date Due	Status	Bill
<input type="checkbox"/> Microcell Solutions	40.07	12/01/99	Unpaid	<a href="#">VIEW</a>
<input type="checkbox"/> Firstline visa	615.51	12/01/99	Unpaid	<a href="#">VIEW</a>
<input type="checkbox"/> ETR	247.34	12/01/99	Sched	

Pay Selected bills

Fig. 7

go2Net	stocks	metaspyp	games	shopping	auctions	email	billbox	Go2Net Personal		
		my bills		are you a biller?		logout		help		
bill		box								
INBOX		OUTBOX		COMPANY LIST		PAY ACCOUNTS		PREFERENCES		
CONTACT US		fill do		MICROCELL Telcom		MICROCELL Telcom		MICROCELL Telcom		
<b>BILL SUMMARY</b>										
<b>CUSTOMER ACCOUNT:</b> M/S APARNA CAWLEY 2491 BENTON DR. MISSISSAUGA ON L3T4S6										
<b>INVOICE NO:</b> 99000002672992 <b>BILLING DATE:</b> Oct 24 1999 <b>ACCOUNT NO:</b> 00166648 <b>PACIS:</b> 101										
<b>ACCOUNT SUMMARY (416) 879-3133</b>										
<b>PREVIOUS ACTIVITY</b> Balance carried forward \$168.76 Payment received September 21, 1999. Thank you! \$ -168.76 New balance \$-										
<b>CURRENT ACTIVITY</b> Monthly charges payable in advance. From October 09 to November 08, 1999 10/200 Flat \$10.00 Call Display \$3.00 Personal Voice Messaging \$2.00 \$25.00										
<b>Unbilled - From September 09 to October 08, 1999</b> Minutes included \$ 0.04 Long Distance Canada - U.S.A. \$ 9.84 \$ 9.84										
<b>Total before tax</b> \$ 34.84 <b>Taxes</b> GST 7% (R1000000000000000) OGST 5% (D33-374) \$ 2.74 \$ 2.74										
<b>Amount due - current charges</b> \$ 40.07										
<b>TOTAL AMOUNT DUE</b> \$ 40.07										
<b>Customer service</b> <b>CUSTOMER SERVICE</b> 416 766-3436 <b>1883-483-3436</b>										
<b>INVOICE NO:</b> 99000002672992 <b>ACCOUNT NO:</b> 00166648 <b>TELEBANK CHG NO:</b> 00000166648 <b>PAYMENT DUE:</b> November 08, 1999										
<b>AMOUNT DUE</b> \$ 40.07 <b>AMOUNT PAID</b>										
M/S APARNA CAWLEY 2491 BENTON DR. MISSISSAUGA ON L3T4S6 <i>Received 1999-10-24 10:17:45 from Interne...</i>										

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[Back to inbox](#)

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Go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

my bill are you a biller? logout help

**bill box**

**Company list**

Company	Scheduled	
MICROCELL SOLUTIONS 0132****2333	yes	<a href="#">Modify</a> <a href="#">Delete</a>
FIRSTLINE VISA 4103 **** * 1111	no	<a href="#">Modify</a> <a href="#">Delete</a>
ETR 212****7589	no	<a href="#">Modify</a> <a href="#">Delete</a>
AMERICAN EXPRESS 3133 **** 3586	no	<a href="#">Modify</a> <a href="#">Delete</a>

Add a company

**Fig. 9**

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go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

my bills are you a biller? logout help

**bill box**

**INBOX** Add a company

**OUTBOX**

**COMPANY LIST**

**PAY ACCOUNTS**

**PREFERENCES**

**CONTACT US**

Please enter the required information about your biller. After completing this information, click add company.

Select a category : Utility

Company name : ABC utility

Delivery method : CheckFree

Account number : 4200 5748 9856 024

Expiry date : 11/02 mm/yy

Enable recurring payment schedule

Add Cancel

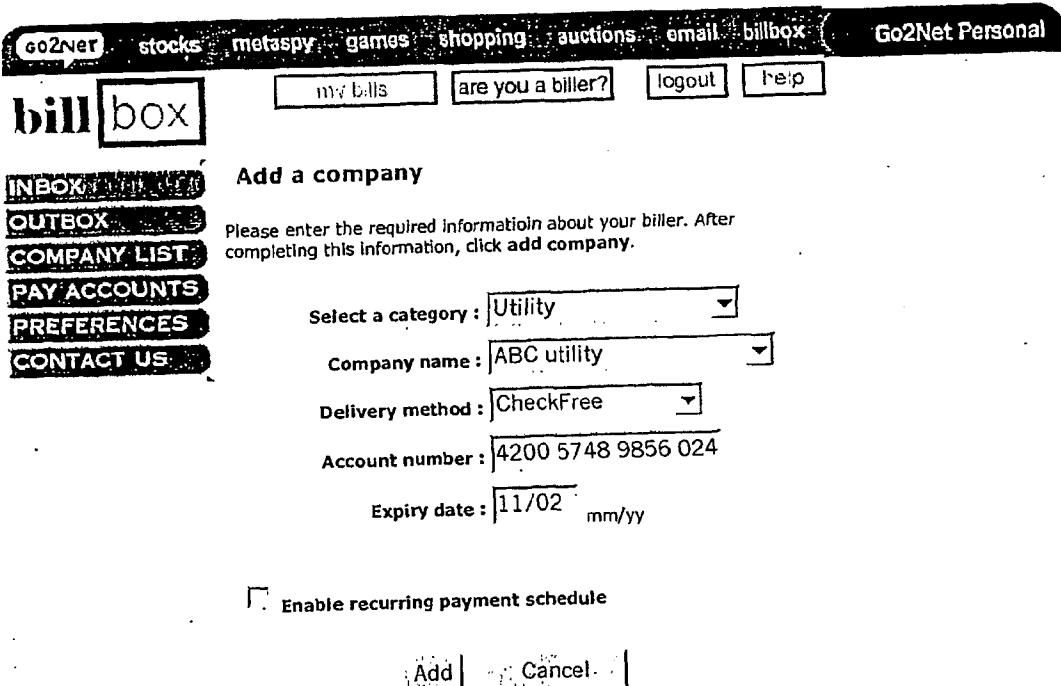


Fig. 10

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go2net stocks metaspv games shopping auctions email billbox Go2Net Personal

billbox my bill are you a biller? logout help

**INBOX**

**OUTBOX**

**COMPANY LIST**

**PAY ACCOUNTS**

**PREFERENCES**

**CONTACT US**

**My outbox**

select Biller name	Amount due	Date Due	Status	Bill
<input checked="" type="checkbox"/> Comtel Telecom Solutions	57.75	11/01/99	Paid	<a href="#">VIEW</a>
<input checked="" type="checkbox"/> Hydro Utility visa	75.51	11/02/99	Paid	<a href="#">VIEW</a>
<input type="checkbox"/> Acro Consultants	233.34	11/04/99	Paid	

[Delete](#)

Fig. 11

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Go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

**bill box**

my bills are you a biller? logout help

**INBOX**

**OUTBOX**

**COMPANY LIST**

**PAY ACCOUNTS**

**PREFERENCES**

**CONTACT US**

**Pay Accounts**

New Credit Card  
 New Debit Account

**Account List**

	ACCOUNT TYPE	ACCOUNT NUMBER	ACCOUNT NAME
<input checked="" type="radio"/>	CHEQUING	35*45	sdfgs
<input checked="" type="radio"/>	VISA	41111*****111111	ddddddddd

Credit Card: Select credit card t  
Card Number: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_ MM/YY  
Name on Card: \_\_\_\_\_

**ADD.**

Fig. 12

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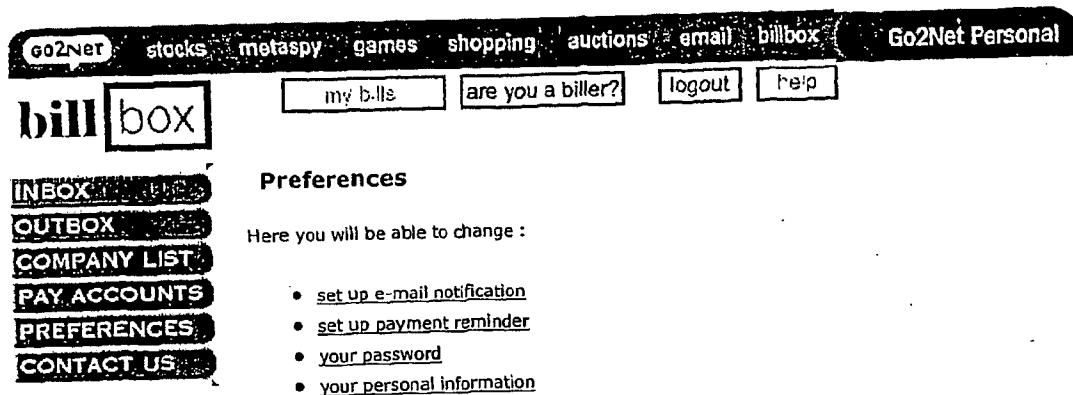


Fig. 13

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', and 'billbox'. To the right of the bar is the text 'Go2Net Personal'. Below the bar, there's a logo for 'bill box' and several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical menu with options: 'INBOX', 'OUTBOX', 'COMPANY LIST', 'PAY ACCOUNTS', 'PREFERENCES', and 'CONTACT US'. The main content area is titled 'Password Change'. It contains a note about password requirements: 'Passwords must be between 6 and 16 characters, at least one of which is numeric (0-9), and at least one of which is a letter (a-z or A-Z). Special characters (&, @ or ~) are acceptable, but not spaces.' Below the note are three input fields with labels: '\*Current Password:', '\*New Password:', and '\*Re-Type New Password:'. At the bottom right are two buttons: 'Submit' and 'Clear'.

Fig. 14

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Go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

**bill box**

my bills are you a biller? logout help

**INBOX**  
**OUTBOX**  
**COMPANY LIST**  
**PAY ACCOUNTS**  
**PREFERENCES**  
**CONTACT US**

*Fields marked with an asterisk (\*) must be entered.*

**PERSONAL INFORMATION**

Please make the necessary changes.

\* First Name:

Middle Name:

Last Name:

\*User ID:

Password:

Retype Password:

\* Email:

\* Street Address:

\* City:

\* State:

\*ZIP Code:

\*Day Phone:  (555-555-5555)

Evening Phone:  (555-555-5555)

**SUBMIT CHANGES**

**Fig. 15**

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspv', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there's a main menu with options like 'INBOX', 'OUTBOX', 'COMPANY LIST', 'PAY ACCOUNTS', 'PREFERENCES', and 'CONTACT US'. On the right side, there's a sidebar with buttons for 'my bills', 'are you a biller?', 'logout', and 'help'. The central area is titled 'Create a Payment Reminder'. It contains several input fields and dropdown menus:

- 'Send me payment reminder \_\_\_\_\_ days before the due date'
- 'Start sending: Nov 3 1999'
- 'Send how often: Once'
- 'Send when: 3:00pm'
- 'Stop sending: Nov 4 1999'

At the bottom right of the form area is a button labeled 'Payment Reminder'.

Fig. 16

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', and 'billbox'. To the right of the bar is the text 'Go2Net Personal'. Below the bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical sidebar with links to 'INBOX', 'OUTBOX', 'COMPANY LIST', 'PAY ACCOUNTS', 'PREFERENCES', and 'CONTACT US'. The main area is titled 'Create a Reminder'. It contains fields for 'Recipients' (with a large text input box), 'Subject' (another text input box), and 'Message' (a large text area). Below these are four sets of dropdown menus for scheduling: 'Start sending' (set to Nov 3, 1999), 'Send how often' (set to Once), 'Send when' (set to 3:00pm), and 'Stop sending' (set to Nov 4, 1999). At the bottom is a button labeled 'Schedule Reminder'.

Fig. 17

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**Go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal**

**bill box** my E It: are you a biller? logout Reo

**Contact Us**

**INBOX** **OUTBOX** **COMPANY LIST** **PAY ACCOUNTS** **PREFERENCES** **CONTACT US**

If you have questions about the Billbox's service, check out our Frequently Asked Questions. Answers to most common questions are immediately available online.

To contact Billbox using email, type your message in the area below and click the Send Email button. You can also speak with a Billbox Service Representative by calling our toll free number: 1-877-BILLS4U (1-877-245-5748).

1. Enter your email address here:

2. Type your message or question below:  

 ↴ ↵

3. Click here:  to submit this to Billbox Customer Service.

4. Please wait for your confirmation message.

**Fig. 18**

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Go2Net stocks metaspv games shopping auctions email billbox Go2Net Personal

**bill box**

[my bills](#) [are you a biller?](#) [logout](#) [help](#)

**Sign up as a biller!**

If you send bills, now is the time to register. Soon you will be able to enjoy the savings of sending your bills electronically. No more hassles of folding and mailing paper bills. Fill out the form below, and when you are authenticated, we will contact you by email.

Company name :	Derivion
Company address :	905 Paces Ferry Road
Company city :	Atlanta
Company state :	Georgia
Company zip :	30326
Company e-mail :	info@derivion.com
Merchant Id : MID-03261973	
<input type="button" value="Sign up"/> <input type="button" value="Reset"/>	

Fig. 19

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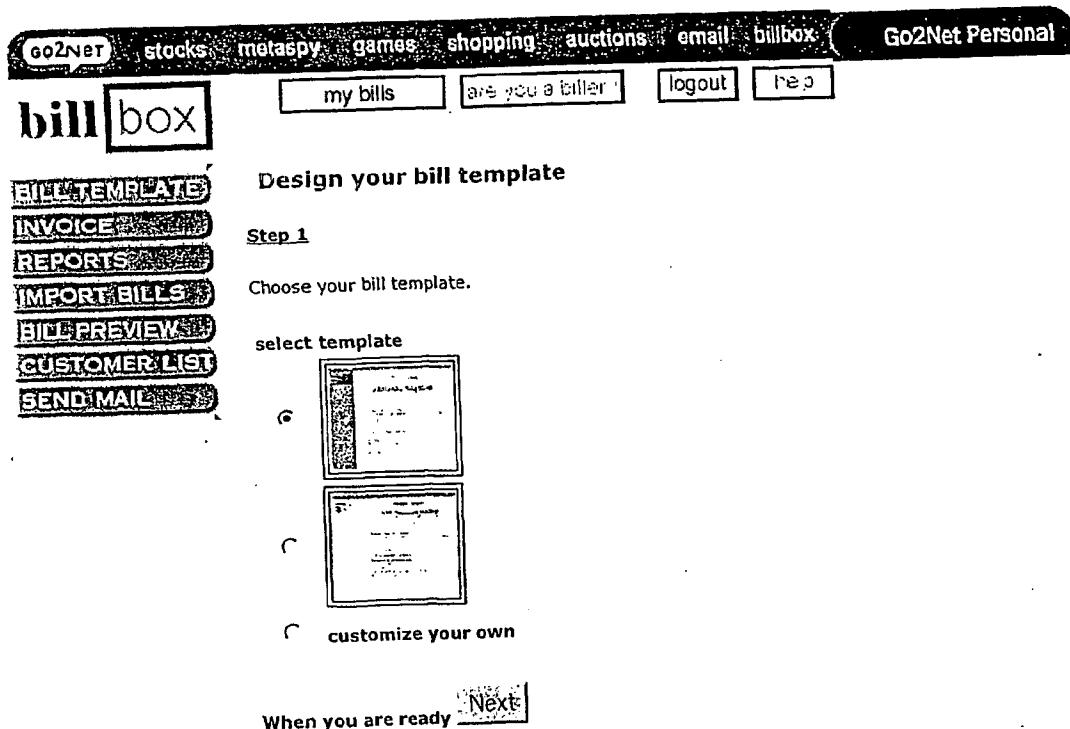


Fig. 20

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go2NET stocks metaspyp games shopping auctions email billbox Go2Net Personal

**bill box** my bills are you a biller? logout help

**Design your bill template**

**Step 3**

This will be the look of your bill.

New Bill	
John Smith 15 Main Street. Toledo, OH 43232	Statement Date: Feb 8, 1999 Due date: Feb 26, 1999 Account number: 245-222-6513 Invoice number: 021453
<b>Bill Summary</b>	
Amount of Previous Bill	\$97.72
Payment Received on Dec 21, 1998. Thank You	\$97.72
Total Current Charge due by Feb 26, 1999	\$109.60

Click here to finish [Finish](#)

Fig. 21

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical menu with options: 'BILL TEMPLATES' (which is selected), 'INVOICE', 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The main content area is titled 'Design your bill template' and is labeled 'Step 2'. It asks 'How will bill data be provided?' and provides five options for selecting a program: 'Quickbooks', 'Peachtree', 'Printer Datastream', 'Database export', and 'Other'. A 'Next' button is located at the bottom right of this section. A note 'When you are ready' is placed above the 'Next' button.

Fig. 22

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there are buttons for 'my bills', 'are you a biller?', 'logout', and 'help'. On the left, a vertical menu lists 'BILL TEMPLATE', 'INVOICE' (which is selected), 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The main content area is titled 'Invoice'. It contains a text block explaining that users can send a one-time invoice as an alternative to creating a template. It also notes that fields marked with an asterisk (\*) must be completed. A form is displayed with the following fields:

- \* Biller's name: Doe Lawn Services
- Amount Options: Amount Due
- \* Recipients: Individual
- \* Description of service/item: Lawn mowing

At the bottom of the form are buttons for 'Continue' and 'Reset'.

Fig. 23

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', and 'billbox'. To the right of the bar is the text 'Go2Net Personal'. Below the bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical menu with options: 'BILL-TEMPLATE' (highlighted), 'INVOICE', 'REPORTS', 'IMPORT-BILLS', 'BILL-PREVIEW', 'CUSTOMER-LIST', and 'SEND-MAIL'. The main area is titled 'Invoice (Step No 2)'. A note says 'Fields marked with an \* must be completed.' There are four input fields with labels and values:

* Name :	Jane Smith
* Billbox Id :	234234
* Amount due :	50
Minimum amount due :	[empty]

Below these fields are two buttons: 'Send Now!' and 'Send Later'.

Fig. 24

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go2net stocks metacrawler games shopping auctions email billbox Go2Net Personal

**bill box**

my bills are you a biller? logout help

**BILL TEMPLATE**

**INVOICE**

**REPORTS**

**IMPORT BILLS**

**BILL PREVIEW**

**CUSTOMER LIST**

**SEND MAIL**

**Invoice**

This is what your invoice will look like. Preview all the information, then click send when you are done.

**Doc Lawn Services**

Jane Smith  
jsmith@hotmail.com

Statement Date: Nov 11, 1999  
Due date: Dec 11, 1999  
Account number: 548-356-8875  
Invoice number: 021454

Bill Summary

Billing Period: 10/10 to 11/10	
Lawn mowing	\$50.00
Total current charge due by Dec 11, 1999	\$50.00

Send Cancel

**Fig. 25**

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there's a header with the 'billbox' logo and links for 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical menu bar with several options: 'BILL TEMPLATE' (highlighted in blue), 'INVOICE', 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The main content area is titled 'Report builder' and contains the following text: 'Use this for to create a report of your client's transactions.' Below this, there are three dropdown menus: 'Report type : Summary', 'Report date : Mon, Nov 01, 1999', and 'Sort by : Invoice number'. At the bottom of the form are two buttons: 'Build report' and 'Cancel'.

Fig. 26

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The screenshot shows a web-based application interface for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', and 'billbox'. To the right of the bar is the text 'Go2Net Personal'. Below the bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left, a vertical menu lists 'BILL TEMPLATE', 'INVOICE', 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The 'REPORTS' link is currently selected. To the right of the menu, under the heading 'Reports', is a table showing bill statistics:

number of bills paid	208
number of bills sent	250
number of bills published	250
number of bills not published	0
number of bills Q.A.'d	250

Fig. 27

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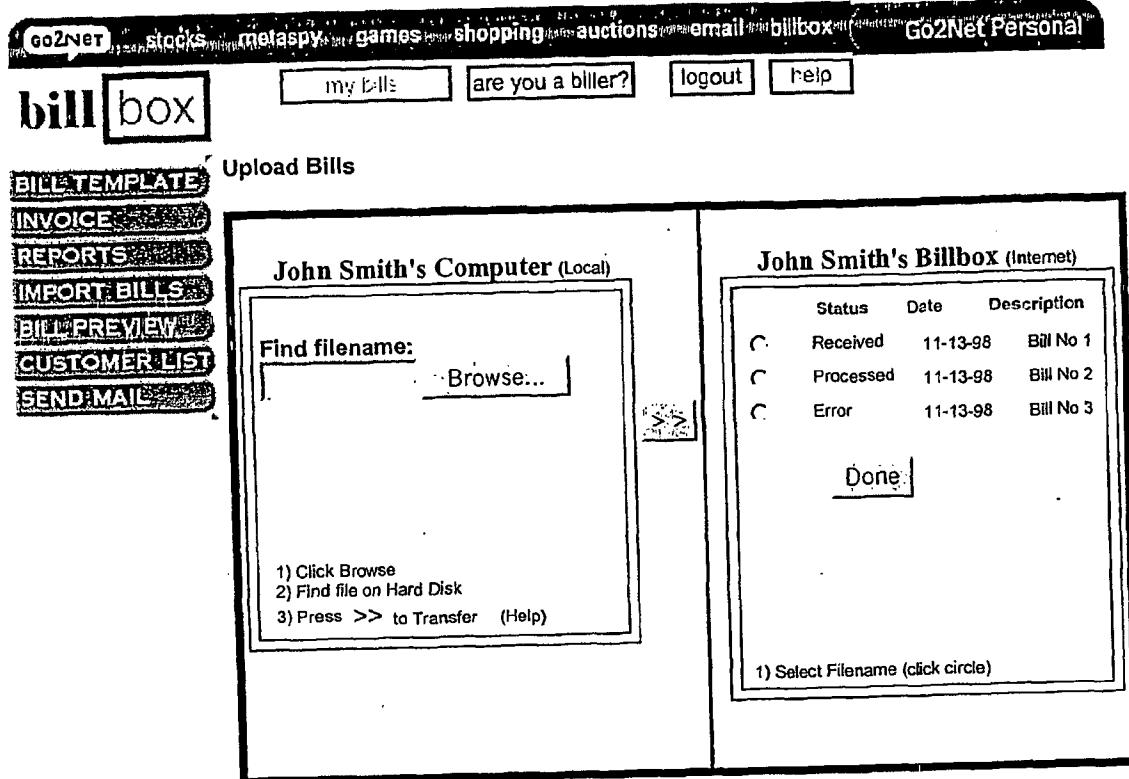


Fig. 28

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The screenshot shows a web-based application for managing bills. At the top, there's a navigation bar with links to 'stocks', 'metaspot', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there's a header with the 'bill box' logo and links for 'my bills', 'are you a biller?', 'logout', and 'help'.

**BILL TEMPLATE**

**INVOICE**

**REPORTS**

**IMPORT BILL'S**

**BILL PREVIEW**

**CUSTOMER LIST**

**SEND MAIL**

**Bill quality assurance**

- Choose the bill you would like to preview.
- When you are satisfied with these bills, click 'Send the bills' to release them to your clients.

Account # 245-222-6523 | View | Edit Bills | Send now | Send later

**Bill Summary**

**Billing Period:** 2/10 to 2/11

Amount of Previous Bill	\$97.72
Payment Received on October 18, 1999. Thank You	\$97.72
<b>Total Current Charge due by November 26, 1999</b>	<b>\$109.69</b>

Statement Date: November 2, 1999  
 Due date: November 26, 1999  
 Account number: 245-222-6523  
 Invoice number: 021453

John Smith  
 15 Main Street.  
 Toledo, OH 43232

**Fig. 29**

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Go2Net stocks metaspyp games shopping auctions email billbox Go2Net Personal

**bill box**

my bills are you a biller? logout help

**BILL TEMPLATE**

**INVOICE**

**REPORTS**

**IMPORT BILLS**

**BILL PREVIEW**

**CUSTOMER LIST**

**SEND MAIL**

**Bill quality assurance**

- Choose the bill you would like to preview.
- When you are satisfied with these bills, click 'Send the bills' to release them to your clients.

Account # 245-222-6523 View Edit Bills Send the bills

Statement Date:	Nov 2, 1999
Due date:	Nov 26, 1999
Account number:	245-222-6523
Invoice number:	021453

Bill Summary	
Billing Period: 2/10 to 2/11	
Amount of Previous Bill	\$97.72
Payment Received on	October 18, 1999. Thank You
Total Current Charge due by	Nov 26, 1999 \$109.69

**Done**

**Fig. 30**

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The screenshot shows a web-based application for managing customer accounts. At the top, there's a navigation bar with links to 'stocks', 'metaspyp', 'games', 'shopping', 'auctions', 'email', and 'billbox'. To the right of the billbox link is a 'Go2Net Personal' logo. Below the navigation bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. On the left side, there's a vertical menu with buttons for 'BILL TEMPLATE', 'INVOICE', 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The 'CUSTOMER LIST' button is highlighted. The main content area has a title 'Customer list' and a sub-instruction 'Here you can add, modify or delete your customer accounts.' Below this, there's a button labeled 'Add a customer' and another labeled 'Account Organizer'. A table lists six customer accounts:

Account	BillBox id	Modify	Delete
Steven Ritchie 257895	115425	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>
Marco Sousa 254865	335263	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>
Dave Moulton 558423	985465	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>
Sean Vanzante 025463	089455	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>
Scott Dyment 201256	054879	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>
Tony Casciaro 959685	356585	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>

Fig. 31

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The screenshot shows a web-based application interface for managing bills. At the top, there's a navigation bar with links for 'GO2NET', 'stocks', 'metaspdy', 'games', 'shopping', 'auctions', 'email', 'billbox', and 'Go2Net Personal'. Below the navigation bar, there are several buttons: 'my bills', 'are you a biller?', 'logout', and 'help'. The main title 'bill box' is displayed prominently. On the left, a vertical menu lists 'BILL TEMPLATE', 'INVOICE', 'REPORTS', 'IMPORT BILLS', 'BILL PREVIEW', 'CUSTOMER LIST', and 'SEND MAIL'. The central part of the screen is titled 'Add an account'. It contains four input fields with labels: 'Client's name: Darryl Sukkel', 'Client's account number: 875966', 'Client's e-mail address: dsukkel@hotmail.com', and 'Add an attribute:'. At the bottom right are two buttons: 'Add account' and 'Cancel'.

Fig. 32

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go2NET stocks metaspyp games shopping auctions email billbox Go2Net Personal

my bills are you a biller? logout help

**bill box**

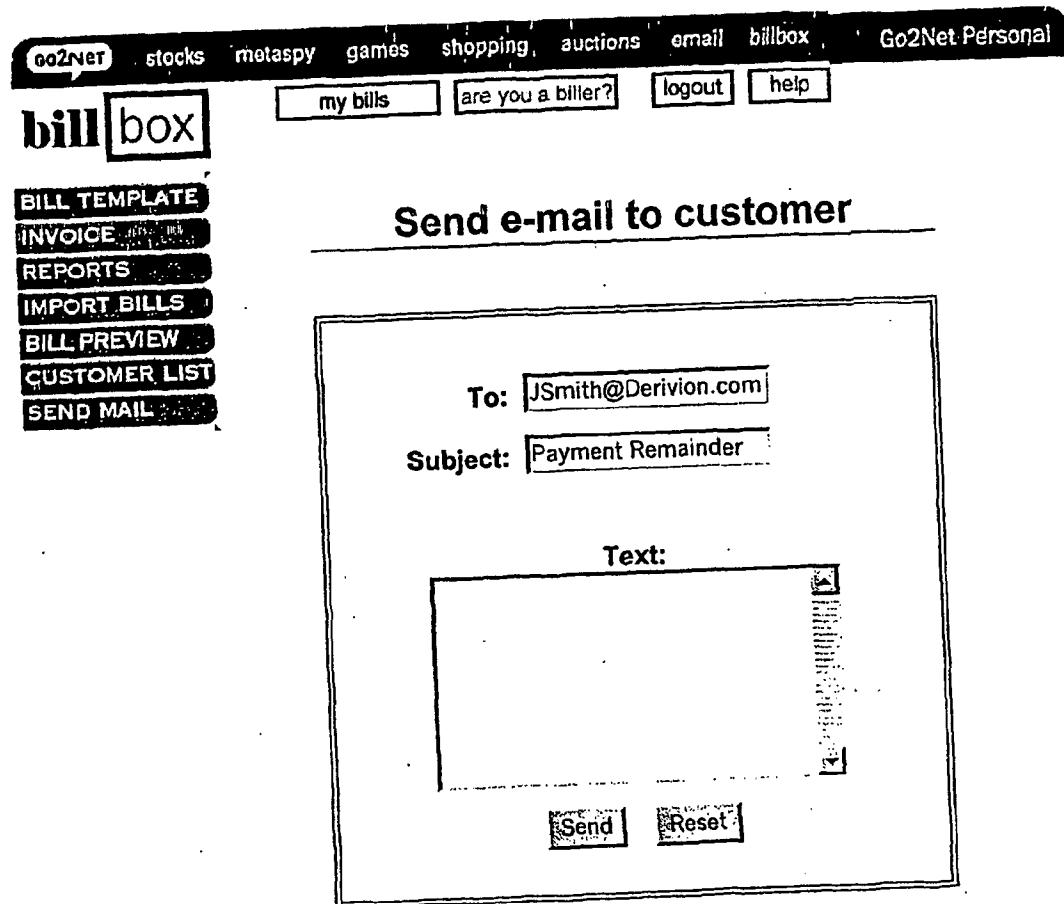
BILL TEMPLATE  
INVOICE  
REPORTS  
IMPORT BILLS  
BILL PREVIEW  
CUSTOMER LIST  
SEND MAIL

**Send e-mail to customer**

To:

Subject:

Text:

A screenshot of a web-based application for managing bills. At the top, there's a navigation bar with links for go2NET, stocks, metaspyp, games, shopping, auctions, email, billbox, and Go2Net Personal. Below the navigation bar, there are buttons for my bills, are you a biller?, logout, and help. On the left, there's a vertical menu with options like BILL TEMPLATE, INVOICE, REPORTS, IMPORT BILLS, BILL PREVIEW, CUSTOMER LIST, and SEND MAIL. The main area is titled "Send e-mail to customer". It contains fields for "To:" (with the value JSmith@Derivion.com) and "Subject:" (with the value Payment Remainer). Below these fields is a large text area labeled "Text:" which is currently empty. At the bottom of this area are two buttons: "Send" and "Reset".**Fig. 33**

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